AMENDMENTS TO THE CLAIMS

1. (Previously presented) A system for phase aligning a first timing signal with a second timing signal, the system comprising:

a selection unit coupled to a plurality of timing sources, wherein one timing source is being used as a reference to produce the first timing signal and at least one timing source is an internal timing source;

a detection unit coupled to the selection unit for detecting a failure in the reference timing source of the first timing signal and causing the selection unit to switch to a second timing source to continue generating the first timing signal;

a unit coupled to the selection unit for comparing the phase of the first timing signal after switching to the second timing source to the phase of the second timing signal, wherein the unit introduces gradual phase alterations to the second timing signal until the first and second timing signals are in-phase, and wherein the unit provides a feedback signal that is in phase with the first timing signal before failure of the reference timing source and is reset, prior to the first and second timing signals being in-phase, to be in phase with the first timing signal from the second timing source after failure of the reference timing source.

2. (Previously presented) The system of claim 1, wherein the detection unit comprises:

an alarm activity unit coupled to the timing sources for detecting a failure in any one of the timing sources; and

a control unit coupled to the alarm unit and the selection unit for determining and instructing the selection unit to switch to another timing source.

3. (Original) The system of claim 1, further comprising an internal timing unit coupled to the selection unit for providing the internal timing source.

4. (Original) The system of claim 1, wherein the unit comprises:

a phase detection unit coupled to the selection unit for comparing the phase of the first timing signal to the phase of the second timing signal;

a phase adjuster unit coupled to the phase detection unit for providing a feedback timing signal that indicates a gradual phase shift of the second timing signal to the phase detection unit and continues the gradual phase shift as long as the first timing signal and the second timing signal are detected as being out of phase by the phase detection unit;

a low pass filter coupled to the phase detection unit for filtering the output timing signal from the phase detector unit; and

an oscillator coupled to the low pass filter and the phase adjuster unit for providing the feedback timing signal.

5. (Previously presented) A method for phase aligning a first timing signal with a second timing signal, the system comprising:

generating a feedback signal in-phase with the first timing signal;

switching to a second timing source to provide the first timing signal when a failure is detected in an existing timing source;

reseting the feedback signal, after failure of the existing timing source, to be in-phase with the first timing signal of the second timing source;

comparing the phase of the first timing signal to the second timing signal to determine the relative phase of the first timing signal to the second timing signal; and

gradually phase shifting the second timing signal until the first timing signal and the second timing signal are in-phase by introducing incremental phase changes to the second timing signal over a plurality of cycles, wherein the feedback

signal is reset to the first timing signal prior to the first timing signal and the second timing signal being shifted in-phase.

6. (Previously presented) The system of claim 3, further comprising a flip-flop disposed between the selection unit and the internal timing unit to provide a signal from the selection unit to the internal timing unit.

7. (Previously presented) The system of claim 3, further comprising a flip-flop disposed between the detection unit and the internal timing unit to provide a signal from the detection unit to the internal timing unit.

8. (Previously presented) The system of claim 1, wherein the first timing signal has a frequency of 8 kHz.

9. (Previously presented) The system of claim 1, further comprising a generator unit coupled to the unit to receive the first timing signal and generate at least one output signal.

10. (Previously presented) The system of claim 9, further comprising a flip-flop disposed between the selection unit and the generator unit to provide a signal from the selection unit to the generator unit.

11. (Canceled)

12. (Currently amended) A system for phase aligning a first timing signal with a second timing signal, the system comprising:

a selection unit coupled to a plurality of timing sources, wherein one timing source is being used as a reference to produce a first timing signal;

a detection unit coupled to the selection unit for detecting a failure in the reference timing source and causing the selection unit to switch to a second timing source to continue generating the first timing signal;

a feedback loop unit coupled to the selection unit for comparing the phase of the first timing signal after switching to the second timing source to the phase of the second timing signal, wherein the unit is arranged to receive a signal from the detection unit after failure of the first timing signal.

13. (Previously presented) The system of claim 12, wherein the detection unit comprises:

an alarm activity unit coupled to the timing sources for detecting a failure in any one of the timing sources; and

a control unit coupled to the alarm unit and the selection unit for determining and instructing the selection unit to switch to another timing source.

14. (Previously presented) The system of claim 12, wherein at least one timing source is an internal timing source.

15. (Previously presented) The system of claim 14, further comprising an internal timing unit coupled to the selection unit for providing the internal timing source.

16. (Previously presented) The system of claim 15, further comprising a flip-flop disposed between the detection unit and the internal timing unit to provide a signal from the detection unit to the internal timing unit.

17. (Currently amended) The system of claim 12, wherein the feedback loop unit comprises:

a phase detection unit coupled to the selection unit for comparing the phase of the first timing signal to the phase of the second timing signal;

a phase adjuster unit coupled to the phase detection unit for providing a feedback timing signal that indicates a gradual phase shift of the second timing signal to the phase detection unit and continues the gradual phase shift as long as the first timing signal and the second timing signal are detected as being out of phase by the phase detection unit;

a low pass filter coupled to the phase detection unit for filtering the output timing signal from the phase detector unit; and

an oscillator coupled to the low pass filter and the phase adjuster unit for providing the feedback timing signal.

18. (Previously presented) The system of claim 12, wherein the first timing signal has a frequency of 8 kHz.

19. (Currently amended) The system of claim 12, further comprising a generator unit coupled to the feedback loop unit to receive the first timing signal and generate at least one output signal.

20. (Previously presented) The system of claim 19, further comprising a flip-flop disposed between the selection unit and the generator unit to provide a signal from the selection unit to the generator unit.